



Hudson River

PCBs SUPERFUND SITE

Region 2: NJ, NY, PR, VI • 290 Broadway, New York, NY 10007

Project Design Work Plans Habitat Delineation and Assessment

May 2003

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Highlights

The U.S. Environmental Protection Agency (EPA) has reached a draft legal agreement with the General Electric Company (GE) for the company to perform the design work needed to implement the cleanup of a 40-mile stretch of the Upper Hudson River. The agreement, which is embodied in a draft Administrative Order on Consent (AOC), incorporates draft versions of design work plans that address the design of the dredging work: habitat delineation and assessment, cultural and archaeological resources, and baseline monitoring for the cleanup project. EPA is releasing the draft work plans for public review and input before they are finalized.

Designing the Hudson River Cleanup

On February 1, 2002, EPA issued a Record of Decision (ROD) for the Hudson River PCBs Superfund Site. The ROD called for targeted environmental dredging of an estimated 2.65 million cubic yards of PCB-contaminated sediments from the Upper Hudson between Hudson Falls, New York and the Federal Dam at Troy. Before dredging can begin, comprehensive engineering plans and specifications for the project must be developed to ensure that it is implemented in a safe and effective manner.

The Habitat Delineation and Assessment Plan is detailed in one of four draft work plans for the cleanup project. It addresses the impacts of dredging and other cleanup activities on aquatic and wildlife habitat in the Upper Hudson.

Habitat Delineation and Assessment Program

The primary goal of this program is to obtain information on the existing physical structure and associated ecological functions of the habitats in the Upper Hudson. This will provide a basis for establishing the criteria for habitat replacement following dredging.

Activities include:

- Documentation of the nature and distribution of habitats potentially affected by dredging activities,
- Identification of Upper Hudson areas where dredging will not occur to provide data on the range of habitat characteristics to use for comparison, and
- Identification and measurement of the specific physical and biological characteristics within each habitat that will be used to design the habitat replacement program and assess its success.

The collection of some data, such as side-scan sonar surveys, to support the habitat delineation effort is already under way as part of the pre-dredging sediment sampling program that began in the fall of 2002. Additional habitat delineation activities in the 40-mile area of the river

targeted for dredging will occur this summer. Habitat assessments of areas that are candidates for Phase 1 of the dredging, which will take place in the first year of the dredging program, will be conducted this summer. Habitat assessments of areas in the Phase 2 dredging program will be conducted in the summer of 2004. GE will submit a Habitat Delineation Report and two Habitat Assessment Reports to EPA for review and approval.

Habitat Delineation

Four major habitat types are present within the Upper Hudson: vegetated river bottom, unvegetated river bottom, fringing wetlands and shoreline. The location and geographic distribution of specific habitats that may be impacted by dredging activities will be delineated and mapped before dredging begins. Habitats will be classified based on data collected in field investigations.

A review of data, including aerial photography, U.S. Geological Survey maps, New York State wetlands maps, and side-scan sonar surveys, will be conducted. These data will then be checked against field observations in representative areas within each habitat to verify accuracy and precision. The collected information will be integrated into a comprehensive geographic information system (GIS) database from which habitat maps will be produced.

Habitat Assessment

Once the habitats have been delineated, comprehensive evaluations of ecological functions within each type of habitat will be conducted. An example of an ecological function is the ability to provide habitat for wildlife populations. Assessments will be undertaken in areas targeted for dredging and in areas where no dredging will occur.

Assessments will be based on field investigations and will focus primarily on direct measurements of the physical and biological structure of the habitats. For example, the assessment of river bottom vegetation will include an evaluation of characteristics such as plant species diversity, stem density, percentage of river bottom covered and plant weight.

Habitat Replacement

A habitat replacement program will be undertaken to replace habitat in the dredged areas that have been affected. Dredged areas of the river will be different from those that existed in the pre-dredging environment. The primary goal of the habitat replacement program will be to replace the ecological functions in the former habitats to within the range found in similar areas of the river where no dredging occurred. Existing habitat conditions in and along the shoreline of the Upper Hudson will be analyzed prior to the start of dredging. The ROD prescribes that approximately one foot of clean material be placed on the river bottom following dredging to aid in habitat replacement, as appropriate.

Fish and Wildlife Surveys

Observational surveys will be conducted during the program to document the presence of fish, birds, reptiles, amphibians and mammals in each of the habitats. This information, along with other relevant data on fish and wildlife, will be used to document the association of species with Upper Hudson River habitats. It will be used in designing the habitat replacement program.

Assessment of Threatened and Endangered Species

The ROD calls for specific biological assessments of the bald eagle and the shortnose sturgeon. The bald eagle is included on federal and New York State lists of threatened species, and the shortnose sturgeon is on the federal list of endangered species. These assessments will evaluate the potential impacts of dredging on the habitats and mating behaviors of both species.

Public Review

The draft work plans for remedial design, habitat delineation or replacement, cultural and archaeological resources, and baseline monitoring have been released for public review and input. EPA will consider public input on the work plans and will decide whether any changes to

these technical documents are appropriate before they are finalized. Because the work plans are incorporated in the AOC, the Agency must reach agreement with GE on any additional changes before it is signed. The three-week public review period begins on May 28 and ends on June 18.

The draft *Remedial Design Work Plan*, the *Baseline Monitoring Program Scoping Document*, *Habitat Delineation and Assessment Work Plan*, and the *Cultural and Archeological Resources Assessment Work Plan* and fact sheets on the work plans are available at information repositories located in Glens Falls, Ft. Edward (Hudson River Field Office), Saratoga Springs, Albany, Poughkeepsie, and New York City. Electronic versions can be found on the EPA project Web site at www.epa.gov/udson. Copies are also available in print and on CD-ROM by calling the Hudson River Field Office.

Written comments on the draft work plans should be sent to the Hudson River Field Office at the address below.

Public Education Sessions

EPA is hosting public information sessions on the draft engineering performance standards for the cleanup project and will allow time at those sessions for questions on and discussion of the draft work plans. The sessions will be held on:

Monday, June 2

Queensbury Hotel
88 Ridge Street
Glens Falls, New York
2:00 pm - 4:00 pm/
6:00 pm - 9:00 pm

Tuesday, June 3

Sage College of Albany,
Kahl Center
140 New Scotland Avenue
Albany, New York
2:00 pm - 4:00 pm/
6:00 pm - 9:00 pm

For More Information

Visit, call, or write to the Hudson River Field Office at the address below or log on to www.epa.gov/udson.

EPA Contacts

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*The Field Office hours are Monday – Friday
8:00 am – 4:30 pm, with evening hours by
appointment.*

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EPA Superfund Ombudsman

EPA Region 2 has designated an ombudsman as a point-of-contact for community concerns and questions about the federal Superfund program in New York, New Jersey, Puerto Rico, and the U.S. Virgin Islands. To support this effort, the Agency has established a 24-hour, toll-free number that the public can call to request information, express concerns, or register complaints about Superfund. The ombudsman for EPA's Region 2 office is: George H. Zachos, U.S. EPA, Region 2, 2890 Woodbridge Avenue MS-211, Edison, New Jersey 08837, (732) 321-6621, Toll-free (888) 283-7626